

1 DEVICE FOR THE CONTROLLED DISTRIBUTION OF
2 PULVERULENT PRODUCTS

3

4 CLAIMS

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6 1. Device for the controlled distribution of
7 pulverulent products including a feed container (1)
8 for said product having an outlet aperture sealed by
9 a rotor (6) provided with a plurality of transfer
10 cavities (7, 8), each of which comprises an inlet
11 aperture and an evacuation aperture, the paths of
12 said inlet apertures successively passing opposite
13 said outlet aperture in order to be filled with said
14 product and said evacuation apertures passing
15 successively opposite a distribution aperture (13,
16 14), connected to means (12) to evacuate said
17 pulverulent product from said transfer cavities (7,
18 8), for emptying therein, of sealing surfaces (5a,
19 5b) of said inlet and evacuation apertures, disposed
20 along said respective paths and means (M, 15) to
21 rotate said rotor (6) around an axis, characterised
22 in that said rotor comprises means for linking said
23 cavities to said rotational axis, arranged to give
24 said cavities a degree of freedom in a substantially

1 perpendicular direction to said sealing surfaces
2 (5a, 5b).

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4 2. Device according to Claim 1 wherein said rotor
5 (6) has at least one axial guiding surface (6a)
6 acting as a seat for rolling means (9a, 9b) between
7 said rotor (6) and said sealing means (5a, 5b).

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9 3. Device according to Claim 2, wherein said rotor
10 (6) has at least one axial guiding surface (6a)
11 receiving on the one hand a rolling bearing (9a)
12 disposed between said rotor (6) and said sealing
13 surfaces (5a) of said inlet apertures, and on the
14 other hand a rolling bearing (9b) disposed between
15 said rotor (6) and said sealing surfaces (5b) of
16 said evacuation apertures.

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18 4. Device according to Claim 1, including a
19 detachable key linkage (16) between said rotor (6)
20 and said drive means (M, 15).

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22 5. Device according to Claim 1, wherein the angle
23 between said outlet aperture of said feed container
24 (1) and said distribution aperture (13, 14) is less
25 than 90°.

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27 6. Device according to Claim 1, wherein said rotor
28 (6) is disk-shaped and said sealing surfaces (5a,
29 5b) substantially extend on the angular portion of
30 this disk located between said outlet apertures of
31 said feed container (1) and said distribution

1 apertures (13, 14), leaving clear the parts of this
2 disk which are located outside said angular portion.

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4 7. Device according to Claim 1, including two
5 concentric circular series of transfer cavities (7,
6 8), the cavities of one series being half a pitch
7 apart from the cavities of the other series.

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9 8. Device according to Claim 1, wherein said
10 cavities have a cylindrical shape, the straight
11 sections of which are substantially smaller than
12 those of the outlet aperture of said feed container
13 (1) and said distribution aperture (13, 14).

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15 9. Device according to Claim 1, wherein said
16 transfer cavities (7, 8) are cylindrical, the length
17 of these cavities not exceeding twice the diameter
18 of their sections.

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20 10. Device according to Claim 6, wherein said
21 transfer cavities (7, 8) are formed in an annular
22 portion (6a) of said disk (6) with a thickness which
23 is greater than that which links this annular
24 portion to the central part of this disk and which
25 has a resilience capable of giving said annular
26 portion (6a) a degree of freedom in said
27 substantially perpendicular direction to said
28 sealing surfaces (5a, 5b).

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30 11. Device according to Claim 6, wherein said
31 transfer cavities (7, 8) are formed on an annular

1 part 6'a linked to the central part of said rotor by
2 floating linkage means.